

ABSTRACT OF THE DISCLOSURE

A flexible capacitor easily produced at low temperature. The capacitor has a dielectric material layer and two electrodes sandwiching the layer. The dielectric material layer contains metal microparticles and/or an organic charge trapping material in an organic insulating material, and the metal microparticles, have an ionization potential and an electron affinity at an energy level between the ionization potential and the electron affinity of the organic insulating material. Once the metal microparticles are charged by applying a voltage, the charge is trapped in the metal microparticles, due to the metal microparticles' energy level relative to the organic insulating material. The trapped charge acts in the same manner as dielectric polarization in the dielectric material, so that extremely large dielectric constant can be obtained practically even when the organic insulating material has a small dielectric constant.